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WATER SUPPLY OUTLOOK FOR OREGON



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

**OREGON STATE UNIVERSITY and STATE ENGINEER
of OREGON**

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
APR. 1, 1974

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

*Cover Photo: Snow Surveyors near Ship Creek,
Alaska snow course.*

SCS PHOTO A-272-11

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR OREGON

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

APRIL 8, 1974

Issued by

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ADMINISTRATOR
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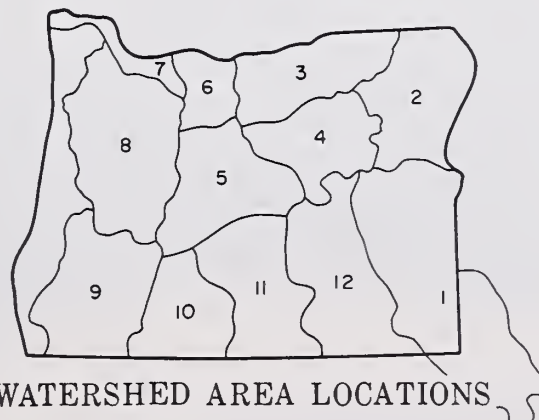
and

JAMES W. HAGLUND, Assistant Snow Survey Supervisor

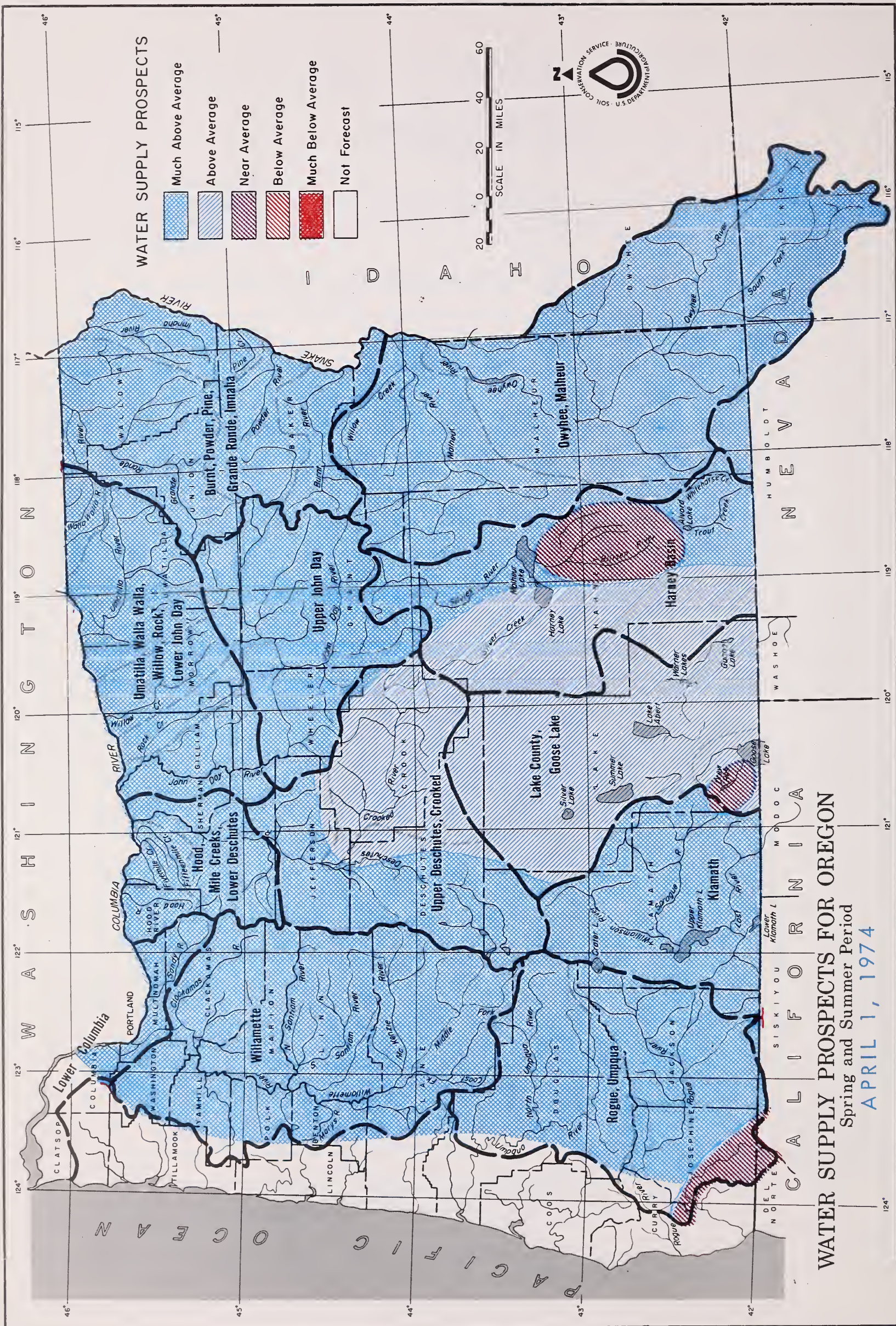
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WATER SUPPLY OUTLOOK for OREGON

APRIL 1, 1974

The water supply outlook for Oregon is extremely good. The mountain snowpack is generally third or fourth highest on record at most snow courses. Winter's precipitation has been above normal and reservoir storage is excellent.

SNOWPACK

Fourteen snow courses located along the northern Cascade crest, in the Blue Mountains above Milton-Freewater and in the Wallowa Mountains, set all time records for snow water equivalent on April 1. The snowpack around Mt. Hood exceeds the record year of 1972 at many locations. Many courses were second, third and fourth highest on record. The snowpack is generally 100-120% in southcentral Oregon, 150 to 200% in the Cascades and 120 to 200% in eastern Oregon.

PRECIPITATION

Precipitation was above normal in all areas of the state during March. It was especially heavy in Klamath and Lake counties where it was over two times normal. Winter precipitation has ranged from 120% in southeastern Oregon up to 165% in the southwestern part of the state. All other areas varied between 140 and 155% of average.

RESERVOIR STORAGE

Twenty-five major irrigation reservoirs are storing 2,816,000 acre feet of water. This is 550,000 acre feet more than the average amount stored on April 1.

STREAMFLOW

Warm temperatures during the middle of March and more than normal precipitation combined to bring about heavy streamflow during the past month. Many streams produced flows 1 1/2 to 2 times normal. Streamflow for the normal snowmelt period, April-July, will generally be excellent in all areas of the state.

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continued -

SUMMARY

The above average condition of stored water supplies and a near record snow-pack insures excellent supplies of water this summer for Oregon.



This report contains data furnished by the Oregon State Engineer, U. S. Geological Survey, NOAA National Weather Service, and other cooperators.

WATER SUPPLY OUTLOOK
OWYHEE, MALHEUR WATERSHEDS
OREGON

as of
APRIL 1, 1974

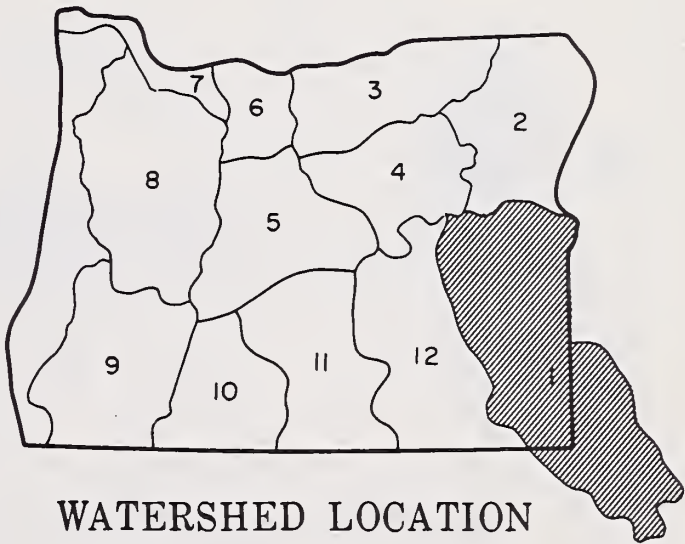
GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK REMAINS ABOVE AVERAGE IN MALHEUR COUNTY. WARM TEMPERATURES AND 149% OF NORMAL PRECIPITATION PRODUCED HIGH MARCH STREAMFLOW. INFLOW INTO OWYHEE WAS THE SECOND HIGHEST SINCE 1910. AS A RESULT, RESERVOIR STORAGE IS EXCELLENT. THE SNOW-PACK REMAINS ABOVE AVERAGE THROUGHOUT THE BASIN AND EXCELLENT SPRING AND SUMMER STREAMFLOWS ARE ANTICIPATED.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Boulder Creek	Excellent	Excellent
Bully Creek	Average	Average
Cow Creek	Average	Average
Jordan Creek	Excellent	Average
Jordan Valley Irrig. Dist.	Excellent	Average
McDermitt Creek	Average	Average
Oregon Canyon Creek	Average	Average
Owyhee Project	Excellent	Excellent
Succor Creek	Average	Average
Tenmile Creek	Average	Average
Vale-Oregon Irrig. Dist.	Average	Average
Warm Springs Irrig. Dist.	Average	Average
Willow Creek (Reservoired)	Excellent	Excellent



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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Bully Creek at Warm Springs	17.0	126	March-May		13.5
Malheur near Drewsey	112	158	April-July		71
	114	158	April-Sept.		72
Malheur, North Fork at Beulah	84	142	April-July		59
	89	138	April-Sept.		64
Owyhee Reservoir net Inflow ^m	420	136	April-July	243	309
	440	133	April-Sept.	270	332

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Owyhee near Rome	1000 250	June 1 July 1	May 24 June 20

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Antelope	70.0	- -	- -	28.9 ^m
Beulah Reservoir	60.0	58.4	42.6	42.9
Bully Creek	30.0	27.8	19.6	22.3
Owyhee	715.0	698.3	702.6	510.1
Warm Springs	191.0	141.3	123.8	119.1

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Malheur River	2	120	105
Owyhee River	4	130	100

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Jordan Creek	4	170	135
Malheur River	5	195	145
Owyhee River	5	95	120

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-71, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (l) Ground measurement. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

BURNT, POWDER, PINE, GRANDE RONDE,
IMNAHA WATERSHEDS

OREGON

as of

APRIL 1, 1974

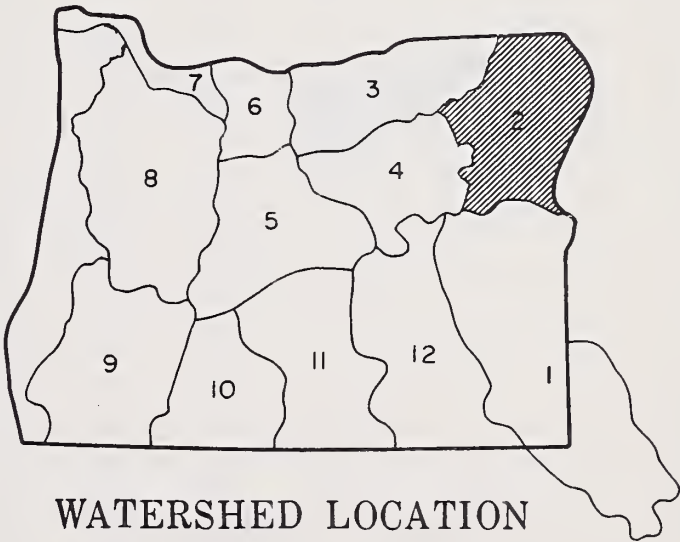
GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK FOR NORTHEASTERN OREGON REMAINS EXCELLENT. THE SNOWPACK IN THE MOUNTAINS IS 50% ABOVE NORMAL, WITH SOME SNOW COURSES SETTING ALL TIME RECORDS AND MANY OF THE COURSES RECORDING THE SECOND OR THIRD HIGHEST WATER CONTENT ON RECORD. STREAMFLOW VOLUMES ARE EXPECTED TO RANGE FROM 120 TO 175% OF NORMAL DURING THE SPRING AND SUMMER MONTHS. ABOVE AVERAGE PRECIPITATION AND SOIL MOISTURE PRODUCED 1 1/2 TIMES NORMAL STREAMFLOW FOR MARCH.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Alder Slope	Excellent	Excellent
Baker Valley	Excellent	Excellent
Big Creek	Excellent	Excellent
Clover Cr. (nr. N. Powder)	Excellent	Excellent
Cove	Excellent	Excellent
Durkee	Excellent	Excellent
Eagle Valley	Excellent	Excellent
Elgin	Excellent	Excellent
Enterprise-Joseph	Excellent	Excellent
Hereford-Bridgeport	Excellent	Excellent
Imnaha River	Excellent	Excellent
LaGrande-Island City	Excellent	Excellent
Lostine-Wallowa	Excellent	Excellent
No. Powder River-Wolf Creek	Excellent	Excellent
Pine Valley	Excellent	Excellent
Powder River-Elk Creek	Excellent	Excellent
Summerville	Excellent	Excellent
Sumpter Valley	Excellent	Excellent
Union-Hot Lake	Excellent	Excellent
Unity	Excellent	Excellent



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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
Bear near Wallowa	80	121	April-Sept.		66
Burnt near Hereford	56	174	April-July		32
	57	172	April-Sept.		33
Catherine near Union	80	124	April-Sept.		65
Eagle Creek abv. Skull Creek	258	147	April-July		175
	279	147	April-Sept.		190
Grande Ronde at La Grande	246	160	April-July	55	154
	254	161	April-Sept.	56	158
Hurricane Near Joseph	59	126	April-Sept.		47
Imnaha at Imnaha	436	142	April-Sept.		307
Lostine near Lostine	155	124	April-Sept.		125
Powder near Sumpter	82	149	April-July		55
	84	150	April-Sept.		56
Wallowa, East Fork near Joseph	12.4	135	April-July		9.2
	15.5	136	April-Sept.		11.4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average i
Phillips Lake	73.5	52.6	50.1	- -
Thief Valley	17.4	17.4	17.4	17.4 ^m
Unity	25.2	24.5	16.7	19.5
Wallowa Lake	37.5	18.0	15.1	23.4

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average i
Burnt River	4	230	150
Grande Ronde River			
above La Grande	4	395	150
Powder River	5	195	145
Wallowa, Imnaha, Catherine Creek	6	195	145

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average i
Burnt, Powder	2	105	120
Grande Ronde, Catherine Creek, Imnaha River	3	110	105

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

UMATILLA, WALLA WALLA, WILLOW, ROCK,
LOWER JOHN DAY WATERSHEDS

OREGON

as of

APRIL 1, 1974

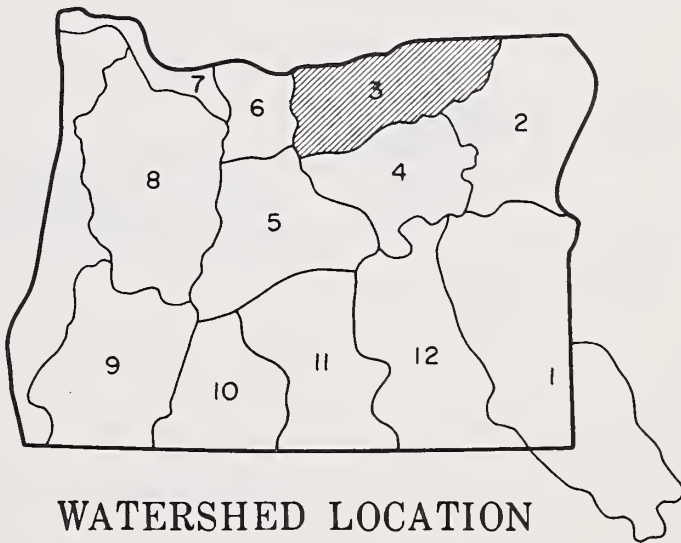
GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK FOR AREA III REMAINS EXCELLENT. THE SNOW-PACK IS NEARLY TWICE THE NORMAL AMOUNT, WITH MANY SNOW COURSES EXCEEDING THE HIGHEST WATER CONTENT ON RECORD. PRECIPITATION WAS SLIGHTLY ABOVE AVERAGE DURING MARCH AND SOIL MOISTURE CONDITIONS ARE NEAR AVERAGE. STORAGE RESERVOIRS WILL ALL FILL. STREAMFLOW WILL BE 20 TO 50% ABOVE NORMAL DURING THE SPRING AND SUMMER MONTHS.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Walla Walla River, No. Fork	Excellent	Average
Walla Walla River, So. Fork	Excellent	Average
Walla Walla River, Main	Excellent	Average
Walla Walla River, Little	Excellent	Average
Couse Creek	Excellent	Average
Dry Creek	Excellent	Average
Pine Creek	Excellent	Average
Umatilla River, Main	Excellent	Average
Wildhorse Creek	Excellent	Average
Umatilla R. (Cold Springs Reservoir)	Average	Average
Umatilla R. (McKay Res.)	Excellent	Excellent
McKay Creek	Excellent	Excellent
Birch Creek	Excellent	Average
Butter Creek	Excellent	Average
Willow Creek	Excellent	Average
Rhea Creek	Excellent	Average
Rock Creek (John Day Tributary)	Excellent	Average



WATERSHED LOCATION

U.S.D.A. SOIL CONSERVATION SERVICE
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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
Birch Creek at Rieth	19.2	121	April-July		15.9
Butter Creek near Pine City	11.0	145	April-July		7.6
McKay near Pilot Rock	32	132	April-Sept.		24
Umatilla near Gibbon	103	149	April-July		69
	108	144	April-Sept.		75
Umatilla at Pendleton	206	148	April-July		139
	212	147	April-Sept.		144
Walla Walla, South Fork near Milton	72	136	April-July		53
	88	133	April-Sept.		66

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Umatilla at Pendleton	550	June 9	May 22

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average i
Cold Springs	50.0	49.5	47.2	49.4
McKay	73.8	65.1	28.0	49.2

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average i
Umatilla, Walla Walla, McKay Creek	3	100	95

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average i
McKay Creek	3	365	160
Umatilla River	3	425	200
Walla Walla River	2	355	195

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

UPPER JOHN DAY WATERSHEDS

OREGON

as of

APRIL 1, 1974

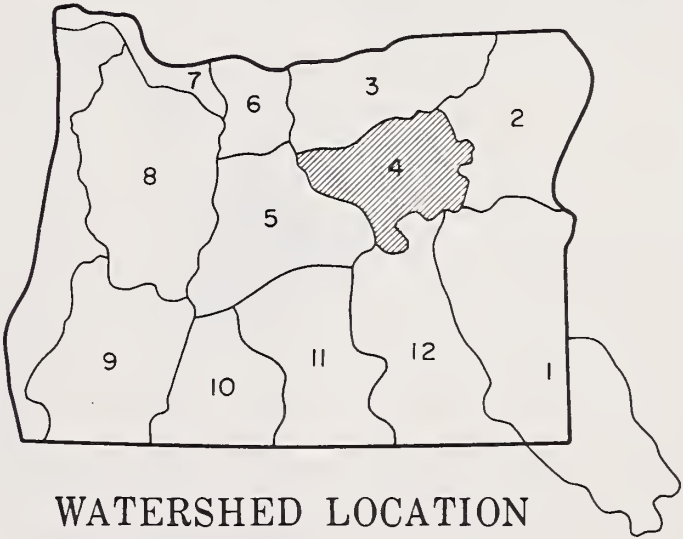
GENERAL OUTLOOK

EXCELLENT WATER SUPPLIES ARE FORECAST FOR THE JOHN DAY. WITH THE SNOW-PACK AT 35 - 40% ABOVE NORMAL, STREAMFLOW VOLUMES ARE EXPECTED TO BE TWENTY-FIVE TO SIXTY-FIVE PERCENT ABOVE AVERAGE. MARCH PRECIPITATION AND SOIL MOISTURE WERE NEAR AVERAGE, AND RESERVOIR STORAGE WAS ABOVE AVERAGE.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Beech Creek	Excellent	Average
Beech Creek-Fox-Long Cr.	Excellent	Average
Bridge-Mountain Creeks	Excellent	Average
Camas Creek	Average	Average
Cherry Creek	Average	Average
Indian-Pine Creeks	Excellent	Average
John Day River, Main Fork	Excellent	Average
John Day River, Mid. Fork	Excellent	Average
John Day River, N. Fork	Excellent	Average
John Day River, S. Fork	Excellent	Average
Monument-Kimberly	Excellent	Average
Strawberry Creek	Excellent	Average



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BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
Camas Creek near Ukiah	42	127	April-July		33
	42	126	April-Sept.		33
John Day, Middle Fork at Ritter	157	150	April-July		105
	165	152	April-Sept.		108
John Day, North Fork at Monument	860	164	April-July		525
	890	165	April-Sept.		540
Strawberry near Prairie City	9.2	133	April-July		6.9
	9.5	125	April-Sept.		7.6

SOIL MOISTURE

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:		RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average i			Last Year	Average i
John Day above Dayville	6	130	105	John Day, North Fork	7	220	135
John Day, North Fork	2	115	105	John Day abv. Dayville	5	180	140

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

UPPER DESCHUTES, CROOKED WATERSHEDS

OREGON

as of
APRIL 1, 1974

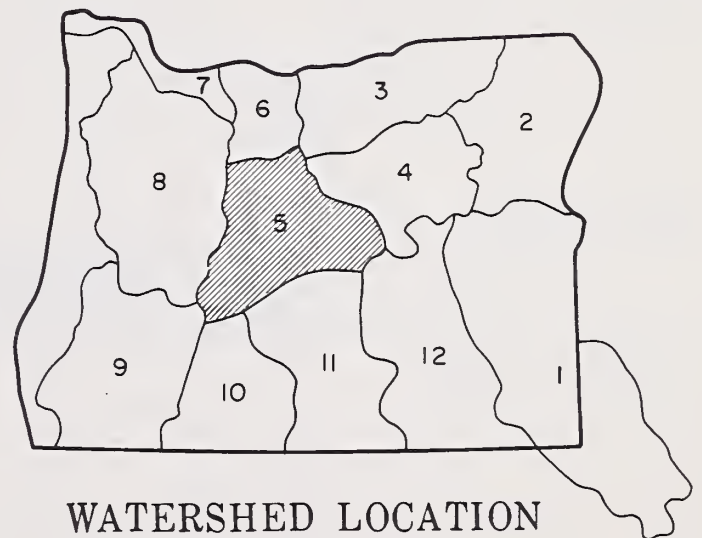
GENERAL OUTLOOK

DESCHUTES AND CROOK COUNTY WATER USERS WILL HAVE ABUNDANT SUPPLIES DURING SPRING AND SUMMER OF 1974. THE SNOWPACK IS 50% ABOVE NORMAL WITH SNOW COURSES IN THE MT. BACHELOR AREA ESTABLISHING NEW RECORDS FOR MAXIMUM WATER CONTENT. PRECIPITATION FOR MARCH WAS 157% OF NORMAL AND STREAMFLOW VOLUMES ARE FORECAST AT 20-80% ABOVE AVERAGE. MOST STORAGE RESERVOIRS ARE EXPECTED TO FILL THIS SPRING.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Arnold Irrigation Dist.	Excellent	Average
Bear Creek	Average	Average
Beaver Creek	Excellent	Average
Camp Creek	Average	Average
Central Ore. Irrig. Dist.	Excellent	Average
Crooked River	Excellent	Average
Deschutes River	Excellent	Excellent
Hay-Trout Creeks	Average	Average
Lone Pine Irrig. Dist.	Excellent	Excellent
Mill Creek	Average	Average
North Unit Irrig. Dist.	Average	Average
Ochoco Creek	Excellent	Average
Sisters Irrigation Dist.	Excellent	Excellent
Snow Creek Irrig. Dist.	Excellent	Excellent
Squaw Creek Irrig. Dist.	Excellent	Excellent
Swalley Ditch	Excellent	Excellent
Tumalo Project	Excellent	Average
Walker Basin Irrig. Dist.	Excellent	Average



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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Beaver Creek near Paulina	27	172	April-July		15.8
	27	170	April-Sept.		16.0
Crane Prairie Reservoir total Inflow	137	176	April-July		78
	198	166	April-Sept.		119
Crescent at Crescent Lake	30	163	April-July		18.4
	34	154	April-Sept.		22
Crooked near Post	117	128	April-July		91
	118	129	April-Sept.		91
Deschutes at Benham Falls	439	122	April-July		360
	639	116	April-Sept.		550
Deschutes below Snow Creek	114	184	April-Sept.		62
Deschutes, Little near La Pine	130	178	April-July	28	73
	140	171	April-Sept.	36	82
Ochoco Reservoir net Inflow	23	122	April-Sept.		188
Odell near Crescent	37	135	April-Sept.		28
Squaw near Sisters	66	130	April-Sept.	33	50
Tumalo near Bend	55	126	April-Sept.	31	44

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Crane Prairie net Inflow	300	*	July 15
Crooked R. near Post	100	June 12	June 1
Deschutes at Bend	1500	Sept. 29	July 1
Little Deschutes near La Pine	400	July 1	June 7
	200	Aug. 6	July 8
*Will not recede to low flow.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Crane Prairie	55.3	41.2	55.9	44.8
Crescent Lake	86.9	82.7	87.8	50.4
Ochoco	47.5	43.8	28.3	30.9
Prineville	153.0	148.8	131.3	123.4 ^m
Wickiup	200.0	185.7	200.3	187.8

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Crooked R., Upper Deschutes River	3	110	105

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Crooked, Ochoco	4	155	120
Deschutes abv. Wickiup	3	250	160
Little Deschutes	4	250	155
Tumalo & Squaw Crs.	3	290	165

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

OREGON

as of
APRIL 1, 1974

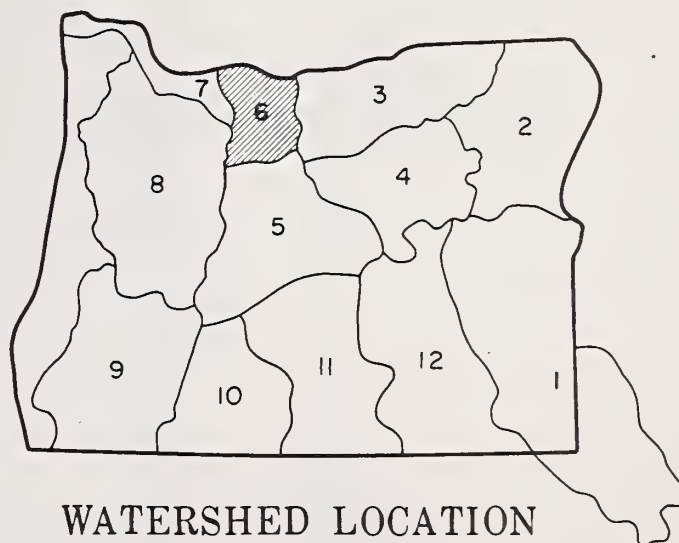
GENERAL OUTLOOK

A RECORD SNOWPACK IN THE MT. HOOD AREA WILL PROVIDE EXCELLENT WATER SUPPLIES FOR THE HOOD RIVER WATERSHEDS. THE SNOWPACK AVERAGES 80% ABOVE NORMAL WITH A RECORD 116.5 INCHES OF WATER SET AT PHLOX POINT NEAR TIMBERLINE LODGE. MARCH PRECIPITATION WAS 41% ABOVE NORMAL AND SPRING AND SUMMER STREAMFLOWS ARE FORECAST AT 145-200% OF AVERAGE.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Aldridge Ditch (Tony Creek)	Excellent	Excellent
Badger Creek	Excellent	Excellent
Dee Irrigation Dist.	Excellent	Excellent
East Fork Irrig. Dist	Excellent	Excellent
Farmers Irrigation Dist.	Excellent	Excellent
Hood River Irrig. Dist	Excellent	Excellent
Juniper Flat	Excellent	Excellent
Middle Fork Irrig. Dist.	Excellent	Excellent
Mile Creeks	Excellent	Excellent
Mill Creek	Excellent	Excellent
Mount Hood Irrig. Dist.	Excellent	Excellent
Rock-Gate-Threemile Crs.	Excellent	Excellent
Tygh Creek	Excellent	Excellent
White River	Excellent	Excellent



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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ¹
Hood River near Tucker Bridge	415	145	April-July		286
	483	146	April-Sept.		332
Hood, West Fork near Dee	189	144	April-July		132
	222	144	April-Sept.		154
White below Tygh Valley	234	198	April-July		118
	263	197	April-Sept.		133

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Branch Inflow	64*	July 15-31	39**
*Average cfs forecast to flow for this two-week period.			
**Average cfs for period of record.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ¹
Clear Lake (Wasco)	11.9	4.8	7.2	3.8

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ¹
Hood River	6	415	190
Mile Creeks	3	665	175
White River	3	385	180

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72 adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

LOWER COLUMBIA WATERSHEDS

OREGON

as of

APRIL 1, 1974

GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK IS EXCELLENT THROUGHOUT THE ENTIRE COLUMBIA BASIN. WATER SUPPLY FORECASTS NOW CALL FOR MUCH ABOVE AVERAGE RUN-OFF IN MOST TRIBUTARIES WITH MAXIMUM OF RECORD VOLUME FLOWS EXPECTED IN SOME AREAS. THE COLUMBIA RIVER AT THE DALLES, OREGON IS EXPECTED TO PRODUCE 132,000,000 ACRE FEET, OR A LITTLE LESS THAN 1972 WHICH WAS THE LARGEST RUNOFF SINCE 1916. THE CURRENT SNOWPACK IS 130 TO 200% OF AVERAGE IN THE BASIN. HEAVIEST AMOUNTS WERE MEASURED IN WASHINGTON, OREGON, SOUTHCENTRAL IDAHO, AND ON THE OKANAGON RIVER IN BRITISH COLUMBIA. WHILE REGULATED STAGES IN THE LOWER COLUMBIA ARE FORECAST BY THE NATIONAL WEATHER SERVICE, RIVER FORECAST CENTER TO BE SEVERAL FEET ABOVE FLOOD STAGE, THEY INDICATE THERE IS VIRTUALLY NO CHANCE OF MAJOR FLOODING ON THE LOWER MAIN STEM OF THE COLUMBIA.



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SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Sandy River	2	385	190

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Columbia at The Dalles	95,000	130	April-June	43,211	73,137
Sandy River near Marmot	132,000	126	April-Sept.	65,012	104,657
	489	143	April-July		342
	544	137	April-Sept.		398

HISTORICAL DATA (Columbia River at The Dalles)

YEAR	STREAMFLOW ^d (1,000 A.F.)			REGULATED PEAK (1,000 cfs)	DATE
	APR. — SEPT.	APR. — JUNE	MAY — JUNE		
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18
1965	114,137	80,024	62,477	520	June 9
1966	87,268	58,120	45,922	396	June 12
1967	107,771	72,408	65,112	622	June 10
1968	89,000	55,500	47,900	404	June 13
1969	112,300	85,700	63,800	515	May 15
1970	88,100	62,800	55,200	425	May 28
1971	122,900	88,400	73,700	557	May 13
1972	134,700	96,400	81,400	619	June 20
1958-72 Avg.	104,300	72,900	59,900	529	

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu.)	FLOW AT THE DALLES (1,000 cfs)	DRAINAGE DISTRICT PUMPHOUSE						
		SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES						
		118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32 (1972)	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.

WATER SUPPLY OUTLOOK

WILLAMETTE WATERSHEDS

OREGON

Area 8

as of
APRIL 1, 1974

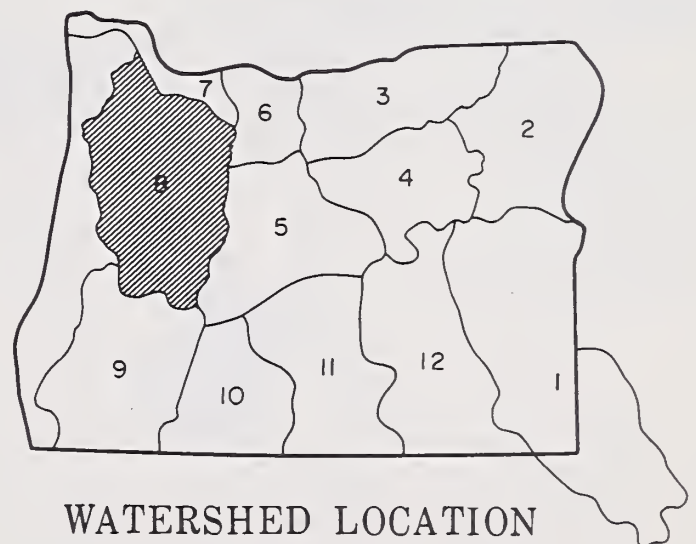
GENERAL OUTLOOK

EXCELLENT WATER SUPPLIES ARE FORECAST FOR WILLAMETTE VALLEY WATER USERS. A RECORD SNOWPACK IN MANY AREAS OF THE CASCADES WILL YIELD SPRING AND SUMMER STREAMFLOW VOLUMES 20-40% ABOVE NORMAL. THE BASIN-WIDE PRECIPITATION AVERAGED 10.8 INCHES DURING MARCH, WHICH WAS 160% OF NORMAL FOR THE PERIOD. RESERVOIRS ARE NOW STORING ABOVE AVERAGE AMOUNTS DUE TO THE HIGH STREAMFLOW DURING MARCH.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Calapooya	Excellent	Excellent
Clackamas	Excellent	Excellent
McKenzie	Excellent	Excellent
Molalla	Excellent	Excellent
Santiam, North	Excellent	Excellent
Santiam, South	Excellent	Excellent
Willamette, Coast Fork	Excellent	Excellent
Willamette, Middle Fork	Excellent	Excellent



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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Clackamas at Estacada	934	138	April-July		674
	1055	134	April-Sept.		789
Clackamas above Three Lynx	725	143	April-July		506
	831	137	April-Sept.		604
McKenzie at McKenzie Bridge	595	131	April-July		453
	771	129	April-Sept.		598
McKenzie near Vida	1389	134	April-July		1035
	1661	132	April-Sept.		1262
McKenzie, So. Fork near Rainbow	300	143	April-July		210
	330	138	April-Sept.		239
Oak Grove Fork above Power Intake	180	146	April-July		123
	226	140	April-Sept.		162
Row near Dorena	135	138	April-July		98
	139	136	April-Sept.		102
Santiam, North at Mehama	956	125	April-July		765
	1061	122	April-Sept.		872
Santiam, South at Waterloo	710	126	April-July		563
	791	127	April-Sept.		623
Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge	934	137	April-July	408	678
	1038	133	April-Sept.	491	779
Willamette, No. Fk. of Mid. Fk. near Oakridge	234	124	April-July		189
	252	120	April-Sept.		209
Willamette at Salem	5549	126	April-July		4397
	6228	126	April-Sept.		4943

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Clackamas River	2	845	225
McKenzie River	3	335	175
Row River	2	295	170
Santiam River	4	570	170
Willamette, Mid. Fk.	5	260	150

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Blue River	85.6*	53.5	45.4	- -
Cottage Grove	30.0*	15.3	21.6	16.6
Cougar	155.2*	94.1	56.9	74.3 ^m
Detroit	299.9*	188.4	110.7	177.6
Dorena	70.5*	38.8	50.7	38.4
Fall Creek	115.0*	71.1	63.4	73.8 ^m
Fern Ridge	94.2*	83.9	68.2	72.9
Foster	30.0*	15.1	16.7	9.0 ^m
Green Peter	270.0*	188.4	150.8	164.7 ^m
Hills Creek	200.0*	128.8	85.1	121.1 ^m
Lookout Point	337.2*	200.5	65.8	173.5
Timothy Lake	61.7	48.2	55.5	52.8
*Multiple purpose reservoir--space reserved primarily for flood runoff.				

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

ROGUE, UMPQUA, WATERSHEDS

OREGON

as of

APRIL 1, 1974

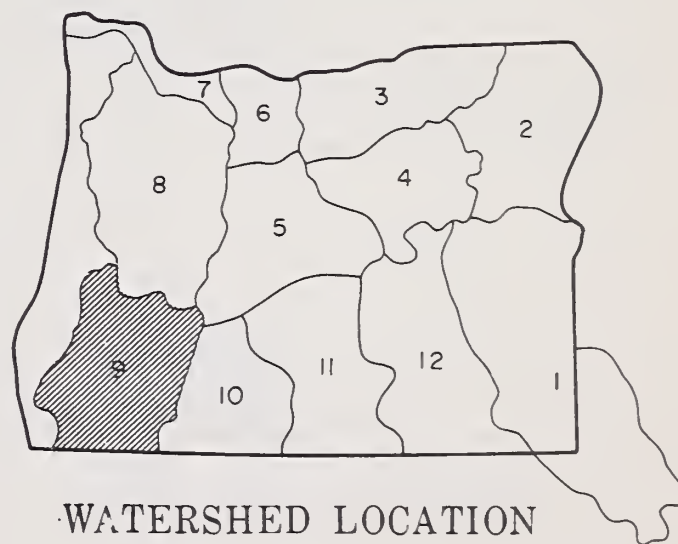
GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK REMAINS NEAR AVERAGE IN THE ILLINOIS BASIN AND EXCELLENT THROUGHOUT THE REMAINDER OF THE ROGUE AND UMPQUA WATERSHEDS. THE SNOWPACK VARIES FROM 110% OF NORMAL IN THE ILLINOIS BASIN TO 190% IN THE NORTH UMPQUA. MARCH PRECIPITATION WAS 80% ABOVE AVERAGE FOR THE MONTH AND MOST STORAGE RESERVOIRS ARE FULL.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Althouse Creek	Average	Average
Applegate River, Big	Excellent	Average
Applegate River, Little	Excellent	Average
Ashland Creek	Excellent	Excellent
Butte Creek, Big	Excellent	Excellent
Butte Creek, Little	Excellent	Excellent
Cow Creek	Average	Average
Deer Creek	Average	Average
Elk Creek	Average	Average
Emigrant Creek (abv. res.)	Average	Average
Evans Creek	Average	Average
Gold Hill Irrigation Dist.	Excellent	Average
Grants Pass Irrig. Dist.	Excellent	Average
Grave Creek	Excellent	Average
Illinois River, East Fork	Average	Average
Illinois River, West Fork	Average	Average
Jump-off-Joe Creek	Average	Average
Neil Creek	Average	Average
Red Blanket Creek	Excellent	Excellent
Rogue River	Excellent	Average
Sucker Creek	Average	Average
Table Rock Irrig. Dist.	Excellent	Average
Thompson Creek	Average	Average
Wagner Creek	Excellent	Average
Williams Creek	Average	Average



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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST		THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average	PERIOD	Last Year
Applegate near Copper	176	132	April-Sept.	133
Clearwater above Trap Creek	83	119	April-Sept.	69
Fourmile Lake net Inflow	5.0	117	April-Sept.	4.3
Hyatt Reservoir net Inflow	5.4	117	April-July	4.6
Illinois River near Kerby	185	97	April-July	191
	191	97	April-Sept.	197
Little Butte, N. Fk. at Fish Lake nr. Lake Cr.	17.1	125	April-Sept.	13.7
Little Butte, S. Fk. near Lake Creek	41	146	April-July	28
Rogue above Prospect	310	121	April-July	256
	372	120	April-Sept.	311
Rogue, South Fork near Prospect	79	130	April-July	61
	93	130	April-Sept.	72
Rogue at Raygold near Central Point	902	123	April-July	735
	1092	123	April-Sept.	890
Rogue at Grants Pass	980	110	April-Sept.	890
Umpqua, No. blw. Lemolo Res. nr. Toketee Falls	215	130	April-Sept.	166

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Little Butte Creek, South Fork	100	May 31	May 27
Rogue at Raygold	1200	Oct. 12	Aug. 7
	*2410	July 1	
	*1540	Aug. 15	
*Average daily cfs forecast to flow on this date.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average i
Emigrant Lake	39.0	39.0	31.4	35.8*
Fish Lake	8.0	5.3	7.6	5.7
Fourmile Lake	16.1	b	- -	9.7
Howard Prairie	60.0	60.6	44.0	38.7
Hyatt Prairie	16.1	15.7	10.2	12.3
*Average for years of record (in base period) after reconstruction.				

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average i
Applegate	3	205	145
Bear Creek	2	230	170
Butte Creek	4	185	145
Illinois River	3	160	110
North Umpqua	3	370	190
Rogue River	6	175	120

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

KLAMATH WATERSHEDS

OREGON

as of

APRIL 1, 1974

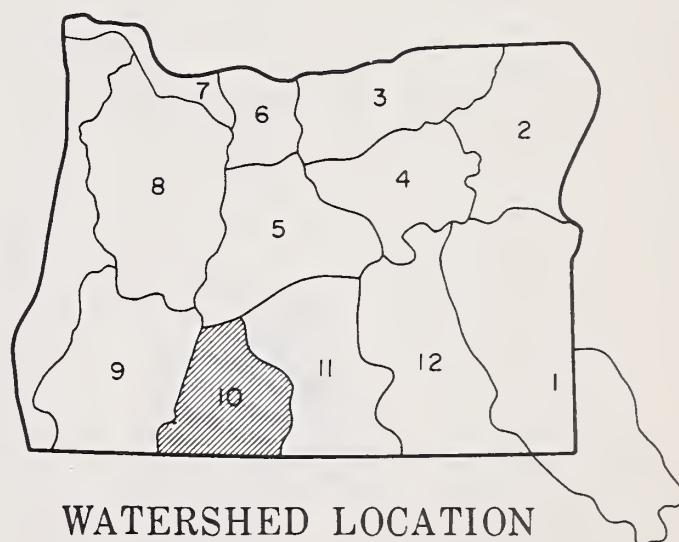
GENERAL OUTLOOK

AN EXCELLENT WATER SUPPLY IS EXPECTED FOR THE KLAMATH COUNTY AREA. THE SNOWPACK IS 135% OF AVERAGE AND RESERVOIR STORAGE IS NEAR 125% OF NORMAL. TWICE THE NORMAL AMOUNT OF PRECIPITATION FELL DURING MARCH, MAINTAINING THE EXCELLENT SOIL MOISTURE. SPRING AND SUMMER STREAMFLOWS SHOULD BE 20 TO 30% ABOVE AVERAGE THROUGHOUT THE BASIN.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ft. Klamath Valley	Excellent	Average
Lost River (Clear Lake)	Excellent	Average
Lost River (Gerber)	Excellent	Average
Lost River (Willow Res.)	Excellent	Average
Sprague River	Excellent	Average
Upper Klamath Lake	Excellent	Average
Williamson River	Excellent	Average



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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Clear Lake Reservoir Inflow	51	128	April-July	22	40
	54	128	April-Sept.	29	42
Gerber Reservoir Inflow	25	132	April-July	7.7	18.6
	25	132	April-Sept.	8.0	18.9
Sprague near Chiloquin	255	120	April-July		212
	290	120	April-Sept.		242
Upper Klamath Lake net Inflow	555	125	April-July	495	445
	700	130	April-Sept.	599	536
Williamson below Sprague River	538	130	April-Sept.		414

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Upper Klamath	1	135	110

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Clear Lake	440.2	362.1	323.0	248.9
Gerber	94.0	86.2	68.6	58.8
Upper Klamath Lake	584.0	520.7	495.2	475.4

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Lost River	4	125	140
Sprague River	3	175	125
Upper Klamath	8	200	135
Williamson River	3	270	145

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

LAKE COUNTY, GOOSE LAKE WATERSHEDS

OREGON

as of

APRIL 1, 1974

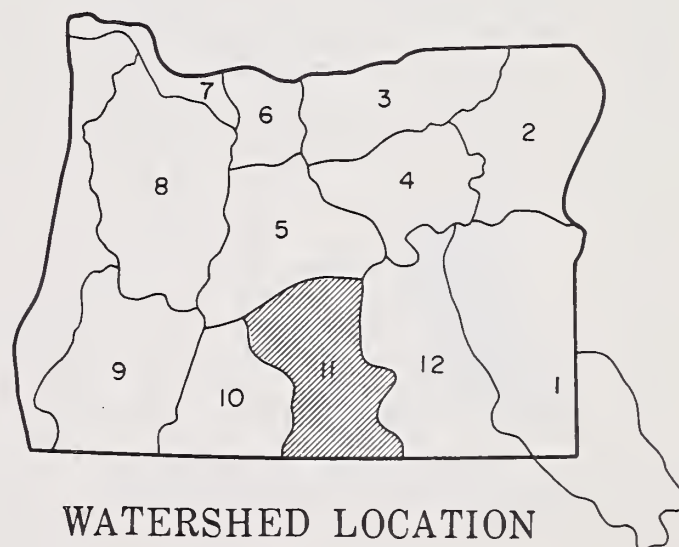
GENERAL OUTLOOK

ABOVE AVERAGE WATER SUPPLIES ARE IN PROSPECT FOR LAKE COUNTY WATER USERS. THE SNOWPACK VARIES FROM SLIGHTLY BELOW AVERAGE IN THE SILVER CREEK WATERSHED TO 35% ABOVE AVERAGE IN THE TWENTYMILE CREEK AREA. PRECIPITATION FOR MARCH WAS 2 1/2 TIMES NORMAL AND STORAGE RESERVOIRS ARE NEAR MAXIMUM STORAGE. WITH ABOVE AVERAGE SOIL MOISTURE CONDITIONS, EXCELLENT STREAMFLOW VOLUMES ARE ANTICIPATED.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Chewaucan River	Excellent	Average
Crooked Creek	Average	Average
Deep Creek	Excellent	Average
Dry Creek	Average	Average
East Side Goose Lake	Excellent	Average
Guano Lake	Average	Average
Honey Creek	Average	Average
Lakeview Water Users Assn.	Average	Average
Rock Creek (Hart Mountain)	Average	Average
Silver-Buck Creeks	Average	Average
Summer Lake	Excellent	Average
Thomas Creek	Average	Average
Twentymile Creek	Excellent	Average
Warner Lakes	Average	Average



U.S.D.A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

Report prepared by
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1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
Chewaucan near Paisley	106	140	April-July	44	75
	108	136	April-Sept.	47	79
Deep above Adel	79	120	April-July	44	66
	82	121	April-Sept.	46	68
Drews Reservoir net Inflow	29	109	April-July		27
Honey Creek near Plush	20	118	April-July	10.5	17.0
	20	118	April-Sept.	10.7	17.2
Silver Creek near Silver Lake	16.0	117	April-July		13.7
	16.3	116	April-Sept.		14.1
Twentymile near Adel	26	140	April-July	14.0	18.6
	28	146	April-Sept.	14.3	19.1

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average i
Chewaucan, Silver Creek, Drew Creek	1	135	110
Honey, Deep, 20-Mi. Cr.	1	105	105

RESERVOIR STORAGE (Thousand Ac. Ft.)

RESERVOIR	Usable Capacity	Usable Storage END OF MONTH		
		This Year	Last Year	Average i
Cottonwood	8.7	8.4	3.5	5.3*
Drews	63.0	63.0	49.9	46.5
*Average for years of record (in base period) after reconstruction.				

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average i
Chewaucan River	3	175	125
Deep Creek	3	115	125
Drew Creek	3	115	115
Honey Creek	3	125	115
Silver Creek	3	585	90
Twentymile Creek	3	125	135

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

HARNEY BASIN WATERSHEDS

OREGON

as of

APRIL 1, 1974

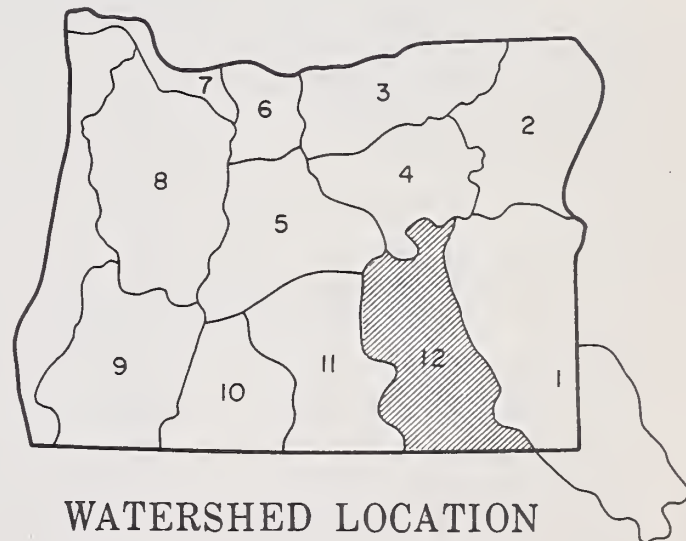
GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK IS EXCELLENT IN THE SILVIES RIVER WATERSHED AND NEAR AVERAGE THROUGHOUT THE REMAINDER OF THE HARNEY BASIN. FORECASTED STREAMFLOWS VARY FROM NORMAL ON THE DONNER UND BLITZEN TO 60% ABOVE NORMAL ON THE SILVIES. THE SNOWPACK REMAINS SLIGHTLY ABOVE AVERAGE EXCEPT FOR THE HIGH AMOUNTS IN THE STRAWBERRY RANGE. PRECIPITATION DURING MARCH WAS NEARLY TWICE THE NORMAL AMOUNT AND THE SOIL MOISTURE REMAINS NEAR AVERAGE.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Catlow Valley	Average	Average
Cow Creek	Average	Average
Donner und Blitzen River	Average	Average
Mill-Coffeepot Creeks	Average	Average
Rattlesnake Creek	Average	Average
Silver Creek	Average	Average
Silvies River	Excellent	Average
Soldier-Prather Creek	Average	Average
Trout Creek	Average	Average
Whitehorse Creek	Average	Average



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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Donner und Blitzen near Frenchglen	49	102	April-July		48
	53	101	April-Sept.		53
Silver near Riley	18.4	118	April-July		15.6
Silvies River near Burns	116	159	April-July	21	73
	118	160	April-Sept.	22	74
Trout Creek near Denio	9.0	120	April-July		7.5
	9.5	120	April-Sept.		7.9

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Silvies River, Silver Cr.	3	105	105
Trout Cr., Donner und Blitzen River	1	95	110

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Donner und Blitzen R.	4	95	110
Silver Creek	3	130	95
Silvies River	4	180	145
Trout Creek	3	50	115

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72 adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 1

APRIL 1, 1974

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. ²
OWYHEE, MALHEUR WATERSHEDS					
Antelope Ridge (Ida.)	3/29	22	7.0	6.7	4.0 ^h
Battle Creek ^e (Ida.)	3/26	T	T	0.8	1.8
Bear Creek (Nev.)	3/27	57	20.9	22.8	21.0
Big Bend (Nev.)	3/21	31	11.2	8.4	8.1
Blue Mountain Springs	3/29	64	24.6	11.8	15.6
Blue Mtn. Springs Pillow*	3/29		21.0	8.7	- -
Buck Pasture ^e	3/26	0	0.0	0.0	1.9 ^m
Buckskin, Lower (Nev.)	3/27	16	4.7	8.3	7.4
Buckskin, Upper (Nev.)	3/27	22	6.9	12.0	10.4
Bull Basin ^e (Ida.)	3/26	0	0.0	0.0	0.5 ^m
Bully Creek ^e	3/26	0	0.0	0.0	1.0 ^h
Call Meadow ^e	3/26	6	2.2	1.1	3.1 ^m
Columbia Basin ^e (Nev.)	3/31	18	6.5	11.9	5.9 ^h
Cottonwood-Indian ^e	3/26	0	0.0	0.0	0.1 ^h
Crane Prairie	3/29	32	11.8	6.7	8.7
Disaster Peak (Nev.)	3/26	34	14.2	12.1	10.8
Eldorado Pass	3/29	3	0.5	0.0	1.0
Fawn Creek ^e (Nev.)	3/31	20	7.4	13.2	2.5 ^h
Fish Creek	3/31	73	28.9	26.3	25.4
Fish Creek Pillow*	3/31		28.8	26.7	- -
Fish Creek ^e	3/26	60	24.0	24.1	23.4
Flag Prairie	3/26	T	T	0.0	2.8 ^m
Fox Creek (Nev.)	3/27	23	8.0	11.7	9.4
Fry Canyon (Nev.)	3/21	18	6.8	8.5	5.3
Gold Creek (Nev.)	3/21	14	5.1	5.3	4.9
Granite Peak (Nev.)	3/28	38	13.7	15.8	15.4 ^h
Hyde Pasture (Ida.)	3/26	18	5.8	0.8	3.0
Jack Creek, Lower (Nev.)	3/27	0	0.0	4.0	2.5
Jack Creek, Upper (Nev.)	3/27	26	9.2	11.7	10.0
Jack Peak (Nev.)	3/27	75	25.1	25.4	24.6 ^h
Lake Creek R. S.	3/29	39	13.6	6.6	8.9
Laurel Draw (Nev.)	3/29	20	7.0	8.7	6.5 ^h
Logan Valley	3/26	18	6.5	3.1	5.6 ^m
Lookout Butte	3/26	0	0.0	0.0	0.0 ^m
Louse Canyon	3/26	13	5.7	3.4	1.9 ^m
Martin Creek (Nev.)	3/28	23	6.3	9.3	9.1
Merritt Mountain (Nev.)	3/31	12	4.5	5.4	4.2 ^h
Midas (Nev.)	4/2	5	0.5	4.9	2.7
Mud Flat (Ida.)	3/29	12	3.9	4.7	4.4
Oregon Canyon	3/26	10	4.4	10.5	4.1 ^m
Quinn Ridge (Nev.)	3/26	0	0.0	0.0	0.8 ^h
Red Canyon (Ida.)	3/28	21	6.7	6.8	4.6 ^m
Rock Spring	3/28	13	4.8	4.0	4.0
Rodeo Flat (Nev.)	3/21	15	5.5	7.7	5.1
76 Creek (Nev.)	3/27	35	12.9	12.1	11.6 ^h
Silver City (Ida.)	3/28	51	20.6	10.5	15.1
Silvies	3/31	27	11.9	13.9	13.1
Silvies Pillow*	3/31		28.8	16.8	- -
Silvies	3/26	0	0.0	11.9	9.4
South Mountain #2 (Ida.)	3/28	39	17.6	9.4	11.8
Stag Mountain (Nev.)	3/31	16	6.1	8.7	3.7 ^h
Stinking Water	3/27	0	0.0	0.0	0.8 ^m
Succor Creek (Ida.)	3/28	12	3.8	3.4	4.6 ^m
Taylor Canyon (Nev.)	3/27	0	0.0	7.0	2.7
Toe Jam (Nev.)	3/31	24	8.9	14.2	6.8 ^h
Tremewan Ranch (Nev.)	3/21	0	0.0	0.0	0.2
Triangle (Ida.)	3/26	0	0.0	0.0	0.2 ^h
Trout Creek	3/26	21	9.2	15.7	7.3 ^m
"V" Lake	3/26	18	7.9	11.9	5.0 ^m
Vaught Ranch (Ida.)	3/26	0	0.0	0.8	1.3 ^m
War Eagle (Ida.)	3/26	60	24.0	25.1	22.2 ^m

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave.
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS					
Aneroid Lake #1	3/29	147	58.4	27.4	37.7
Aneroid Lake #2	3/28	123	51.6	24.4	33.6
Anthony Lake	3/28	87	35.3	18.8	27.4
Bald Mountain ^e (Ore.)	4/4	84	33.6	16.8	24.6
Beaver Reservoir (Rev.) ^{1/}	3/28	48	17.5	6.7	12.8
Big Sheep ^e	4/4	105	42.0	20.8	24.7
Blue Mtn. Summit	3/28	32	10.7	5.3	7.5
Bourne	3/27	57	21.9	9.6	14.6
County Line	3/28	12	4.1	1.5	3.9
Dooley Mountain	3/25	30	10.3	5.6	8.0
Eilertson Meadows	3/26	41	16.2	7.1	11.3
Eldorado Pass	3/29	3	0.5	0.0	1.0
Gold Center	3/27	42	16.8	8.5	12.5
Goodrich Lake	3/28	128	52.5	28.6	39.5
Intake House	3/26	41	14.4	5.6	10.6 ^h
Little Alps	3/28	56	20.2	8.2	14.8 ^h
Little Antone	3/28	16	5.4	T	5.5 ^m
Lucky Strike	3/28	37	13.4	8.2	13.0
Lucky Strike Pillow*	b			5.1	-
Meacham	3/27	44	18.2	2.2	8.2
Mirror Lake ^e	b			52.6	72.5 ^m
Moss Spring	4/4	89	33.6	17.2	24.4 ^h
Power Plant	3/26	11	3.6	0.0	3.4 ^h
Schneider Meadow	3/25	111	45.7	28.1	31.1
Schoolmarm	3/28	6	1.9	1.0	2.8
Standley ^e	4/4	122	51.2	28.9	33.4 ^m
Taylor Green	4/4	62	23.2	12.2	16.9
Tipton	3/28	39	14.8	7.6	9.5
Tipton Snow Pillow*	3/28		19.7	9.8	-
Tollgate	3/27	102	48.4	15.0	25.5
TV Ridge ^e	4/3	84	31.0	16.4	23.8 ^m
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS					
Arbuckle Mountain	3/27	32	13.2	7.0	10.2
Arbuckle Mtn. Pillow*	3/27		31.1	16.5	-
Battle Mountain Summit	3/29	T	T	0.0	1.2 ^h
Blue Mountain Camp	3/27	62	28.0	6.6	14.0 ^h
Butte Creek Summit	4/1	0	0.0	0.0	-
Emigrant Springs	3/27	14	6.2	0.0	2.3
High Ridge Pillow*	3/26		32.3	-	-
Lucky Strike	3/28	37	13.4	8.2	13.0
Lucky Strike Pillow*	b			5.1	-
Meacham	3/27	44	18.2	2.2	8.2
Tollgate	3/27	102	48.4	15.0	25.5

BASIC DATA SUPPLEMENT 1

APRIL 1, 1974

SNOW

SNOW	THIS YEAR			PAST REC.	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. of 3 Yrs.
UPPER JOHN DAY WATERSHEDS					
Anthony Lake	3/28	87	35.3	18.8	27.4
Arbuckle Mountain	3/27	32	13.2	7.0	10.2
Arbuckle Mt. Pillow*	3/27		31.1	16.5	- -
Battle Mountain Summit	3/29	T	T	0.0	1.2 ^h
Beech Creek Summit	Discontinued				
Blue Mountain Springs	3/29	64	24.6	11.8	15.6
Blue Mt. Springs Pillow*	3/29		21.0	8.7	- -
Blue Mountain Summit	3/28	32	10.7	5.3	7.5
Butte Creek Summit	4/1	0	0.0	0.0	- -
Derr	3/26	34	12.9	7.5	9.0
Gold Center	3/27	42	16.8	8.5	12.5
Indian Creek Butte ^e	3/26	78	30.4	22.1	23.1 ^h
Izee Summit	3/30	24	7.8	6.2	6.7
Lucky Strike	3/28	37	13.4	8.2	13.0
Lucky Strike Pillow*	b			5.1	- -
Marks Creek	3/29	T	T	0.0	1.7
Ochoco Meadows	3/28	33	11.6	6.4	8.6
Olive Lake ^e	4/4	78	29.6	9.9	21.1
Schoolmarm	3/28	6	1.9	1.0	2.8
Snow Mountain	3/28	42	13.8	10.6	12.6
Snow Mt. Pillow**	3/22		16.7	6.4	- -
Starr Ridge	3/28	17	6.0	2.8	3.9
Tipton	3/28	39	14.8	7.6	9.5
Tipton Snow Pillow*	3/28		19.7	9.8	- -
Williams Ranch	Discontinued				
UPPER DESCHUTES, CROOKED WATERSHEDS					
Bald Peter	4/1	134	50.4	17.8	- -
Caldwell Ranch	3/28	43	14.6	4.1	7.3
Cascade Summit	3/29	113	43.9	18.1	28.8
Chemult	3/29	34	9.7	5.1	7.1
Chemult Alternate	3/29	42	13.5	6.4	- -
Derr	3/26	34	12.9	7.5	9.0
Hogg Pass	3/28	152	65.3	17.8	41.1
Hungry Flat	3/29	15	7.6	0.0	2.2
Irish-Taylor Pillow** ^{1/}	3/14		59.9	24.9	38.0
Lionshead ^e	b			- -	- -
Marks Creek	3/29	T	T	0.0	1.7
New Crescent Lake	3/27	61	23.7	5.7	13.0
New Dutchman Flat #2	3/30	190	80.7	32.8	51.0
Ochoco Meadows	3/28	33	11.6	6.4	8.6
Racing Creek	4/1	85	29.8	6.8	- -
Snow Mountain	3/28	42	13.8	10.6	12.6
Snow Mt. Pillow**	3/22		16.7	6.4	- -
Tamarack	3/29	10	3.5	1.5	3.1 ^h
Tangent	3/29	88	41.6	12.9	21.6
Three Creek Butte	3/29	42	15.7	2.3	8.2
Three Creek Meadow	3/29	71	28.9	7.6	18.3
Three Creek Mdw. Pillow**	b			11.1	- -
Waldo Lake	3/28	120	47.7	17.6	31.0
Whitewater Meadow ^e	b			- -	- -
Willamette Pass	3/27	134	59.7	26.0	40.3
Willamette Pass Pillow**				- -	- -

SNOW

SNOW	THIS YEAR			PAST REC.	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave.
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS					
Brooks Meadows	3/26	37	16.1	3.9	10.2
Clear Lake	3/25	50	20.3	1.8	8.9
Clear Lake (Experimental)	3/27	73	30.0	6.3	15.2
Cooper Spur (Revised) ^{1/}	4/3	56	21.1	4.7	12.7 ^h
Greenpoint	3/31	73	29.8	6.4	16.1
Knebal Springs	3/26	28	11.8	1.2	6.3 ^h
Mt. Hood Test Site ^{1/}	3/26		95.8	30.8	65.0
Parkdale	c				
Red Hill	4/2	194	83.8	21.2	41.6
Still Creek	3/25	108	47.8	10.0	24.1
Still Creek Alt. #2	3/25	109	49.7	10.5	- -
Switchback	3/29	71	30.0	6.2	13.1 ^h
Tilly Jane	3/23	158	74.9	20.9	42.1
Ulrich Ranch Junction	3/26	14	6.0	0.0	3.0 ^h
Umbrella Falls	b			30.1	70.8 ^h
Upper Valley	c				
WILLAMETTE WATERSHEDS					
Cascade Summit	3/29	113	43.9	18.1	28.8
Champion	3/28	129	54.8	18.7	29.2
Clackamas Lake	4/2	57	22.3	1.6	11.7
Clear Lake	3/25	50	20.3	1.8	8.9
Clear Lake (Expt.)	3/25	73	30.0	6.3	15.2
Dead Horse Grade	3/31	65	28.7	9.1	17.3
Detroit (Town)	3/28	0	0.0	0.0	0.0
Detroit Dam	3/28	0	0.0	0.0	0.0
Fawn Meadow	3/26	108	45.2	16.0	40.3
Golden Curry Creek	3/28	T	T	T	3.4
Hogg Pass	3/28	152	65.3	17.8	41.1
Lake Harriet	b			- -	0.0
Laurel Mountain	3/29	16	8.0	0.0	- -
Layng Creek	3/28	0	0.0	0.0	0.0
Lemiti Meadow	4/2	105	39.0	8.0	25.8
Lookout Point Dam	3/29	0	0.0	0.0	0.0
Lost Creek Ranch	3/31	0	0.0	0.0	2.2
Lund Park	3/28	0	0.0	0.0	0.0
Marion Forks	3/28	54	24.6	0.0	11.7
Marys Peak (Revised) ^{1/}	3/29	23	11.0	4.1	12.4 ^m
McCredie Springs	3/29	0	0.0	0.0	0.0
McKenzie	3/31	165	73.7	26.4	43.5
McKenzie Bridge	3/31	0	0.0	0.0	0.0
Mill City	3/28	0	0.0	0.0	0.1
Mt. Hood Test Site** ^{1/}	3/26		95.8	30.8	65.0
Oakridge	3/29	0	0.0	0.0	0.0
Olallie Meadow	4/2	130	54.0	- -	- -
Peavine Ridge Pillow**	3/27		36.2	4.9	16.3 ^h
Power Line	4/3	112	44.6	15.7	22.4 ^m
Railroad Overpass	3/29	0	0.0	0.0	0.4
Saddle Mountain Pillow**	3/22		16.9	0.1	- -
Salt Creek Falls	3/29	59	23.8	5.9	15.4
Santiam Junction	3/28	97	41.1	5.2	21.6
Seine Creek Pillow**	3/18		4.2	0.0	- -
Still Creek	3/25	108	47.8	10.0	24.1
Still Creek Alt. #2	3/25	109	49.7	10.5	- -
Timothy Lake	3/29	78	29.9	5.1	15.7 ^m
Valsetz Summit	3/29	0	0.0	0.0	- -
Vida	3/31	0	0.0	0.0	0.0
Waldo Lake	3/28	120	47.7	17.6	31.0
Weaver Creek	3/28	0	0.0	0.0	0.2
White Branch Slide	3/31	36	16.1	0.0	6.1
Whitewater Bridge	3/28	0	0.0	0.0	2.0
Willamette Pass	3/27	134	59.7	26.0	40.3
Willamette Pass Pillow**	b			- -	- -

BASIC DATA SUPPLEMENT 1

APRIL 1, 1974

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. i

ROGUE, UMPQUA WATERSHEDS					
Althouse (Revised) ^{1/}	3/29	22	10.0	7.2	7.5
Annie Spring	4/5	186	75.9	37.4	45.9 ^h
Beaver Dam Creek	3/29	43	18.7	9.0	11.4 ^h
Big Red Mountain	3/28	122	49.8	23.2	30.3
Billie Creek Divide	3/27	71	28.4	16.5	20.7
Caliban	3/28	140	55.0	26.7	32.8
Caliban (Alternate)	3/28	146	53.5	-	-
Champion	3/28	129	54.8	18.7	29.2
Cold Springs Camp	3/22	120	48.3	25.3	34.7 ^h
Cold Spgs. Camp Pillow**	3/22		37.9	25.9	-
Deadwood Junction	3/29	18	6.5	7.4	7.4 ^h
Diamond-Crater Sum. (Rev) ^{1/}	3/25	112	45.9	20.0	31.4 ^h
Diamond Lake	3/25	84	31.6	11.6	21.2
Fish Lake	3/28	50	18.1	8.4	11.4 ^h
Fourmile Lake	3/27	70	28.4	18.8	25.1 ^h
Grayback Peak	3/26	71	28.9	16.9	26.2 ^h
Howard Prairie Reservoir	3/29	26	10.1	6.7	6.7 ^h
Hyatt Prairie	3/29	18	6.9	5.6	6.3 ^h
King Mountain #1	3/29	27	10.6	6.2	8.4 ^m
King Mountain #2	3/29	16	4.6	3.7	6.4 ^m
King Mountain #3	3/29	0	0.0	0.3	0.3 ^m
King Mountain #4	3/29	0	0.0	0.0	0.0 ^m
King Mountain #5	3/29	0	0.0	0.0	0.0 ^m
King Mountain #6	3/29	0	0.0	0.0	0.0 ^m
Little Red Mountain	3/28	98	38.1	16.3	24.5 ^h
Mt. Ashland Switchback	3/28	156	58.7	26.8	33.2 ^h
Mule Creek	3/29	15	6.8	0.7	-
North Umpqua	3/28	66	26.3	5.8	12.2
Page Mountain	3/29	6	2.6	0.8	3.6
Park Headquarters	4/5	242	103.0	47.4	60.3
Red Butte #1	3/28	60	25.1	8.9	15.0 ^m
Red Butte #2	3/28	27	10.7	4.9	9.0 ^m
Red Butte #3	3/28	6	3.0	0.7	6.4 ^m
Red Butte #4	3/28	T	T	0.0	2.8 ^m
Red Butte #5	3/28	0	0.0	0.0	0.0 ^m
Red Butte #6	3/28	0	0.0	0.0	0.0 ^m
Seven Lakes #2	3/26	130	51.8	31.9	42.1
Seven Mile	3/27	106	42.5	25.8	-
Silver Burn	3/27	40	18.5	3.8	10.9
Siskiyou Summit (Rev.) ^{1/}	3/28	9	3.3	0.0	3.4
Ski Bowl Road	3/28	120	44.6	20.0	27.6 ^h
South Fork Canal	3/28	0	0.0	0.3	0.7
Trap Creek	3/28	53	22.8	3.8	9.0
Whaleback	3/28	135	46.6	23.7	32.5

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. i

KLAMATH WATERSHEDS					
Annie Spring	4/5	186	75.9	37.4	45.9
Billie Creek Divide	3/27	71	28.4	16.5	20.7
Chemult	3/29	34	9.7	5.1	7.1
Chemult (Alternate)	3/29	42	13.5	6.4	-
Chiloquin (PP&L)	3/31	0	0.0	-	T
Cold Springs Camp	3/22	20	48.3	25.3	34.7 ^h
Cold Spgs. Camp Pillow**	3/22		37.9	25.9	-
Crazyman Flat ^e	4/2	42	16.0	5.6	9.0 ^h
Crowder Flat ^e (Calif.)	4/2	6	1.9	0.0	1.5
Crystal (PP&L)	3/30	8	4.3	4.7	5.3
Diamond-Crater Sum (Rev) ^{1/}	3/25	112	45.9	20.0	31.4 ^h
Diamond Lake Junction (97)	3/25	8	3.1	T	4.1 ^h
Dog Hollow ^e	4/2	5	1.6	0.0	0.5
Finley Corrals ^e	4/2	54	22.1	14.4	14.7 ^h
Fort Klamath (PP&L)	4/1	0	0.0	0.5	1.2 ^h
Fourmile Lake	3/27	70	28.4	18.8	25.1 ^h
Gerber	4/1	6	1.5	0.0	0.6 ^h
Harriman (PP&L)	4/1	T	T	0.0	1.8 ^m
Howard Prairie	3/29	26	10.1	6.7	6.7 ^h
Hyatt Prairie Reservoir	3/29	18	6.9	5.6	6.3 ^h
Kirk. (PP&L)	b			0.0	2.6 ^m
Lake of the Woods	3/27	35	11.2	5.5	8.9
Park Headquarters	4/5	242	103.0	47.4	60.3
Quartz Mountain	3/29	4	1.3	4.3	4.5
Seven Lakes #2	3/26	130	51.8	31.9	42.1
Seven Mile	3/27	106	42.5	25.8	-
State Line ^e (Calif.)	4/2	30	11.1	6.4	7.1
Strawberry	3/31	24	7.9	7.0	6.2
Strawberry ^e	3/31	22	7.7	4.0	5.7 ^h
Summer Rim	3/28	60	24.7	13.0	17.0
Summer Rim Pillow*	3/28		25.7	10.9	-
Summer Rim ^e	4/2	66	27.0	13.8	17.3 ^m
Sycan Flat ^e	4/2	12	3.8	1.1	4.7 ^h
Taylor Butte	3/21	11	4.4	0.3	3.2

LAKE COUNTY, GOOSE LAKE WATERSHEDS

Adin Mountain (Calif.)	3/27	42	16.6	14.1	12.3
Bald Mountain (Nev.)	4/1	20	6.6	5.2	2.5
Bear Flat Meadow ^e	4/2	34	12.6	8.6	10.2
Camas Creek	3/29	28	10.4	8.3	9.1
Cedar Pass (Calif.)	3/19	58	21.3	19.0	15.6 ^m
Colvin Creek ^e	4/2	12	3.8	3.7	4.9 ^m
Cox Flat ^e	4/2	12	3.8	6.4	6.1
Crowder Flat ^e (Calif.)	4/2	6	1.9	0.0	1.5
Dismal Swamp ^e (Calif.)	4/3	59	24.2	18.9	18.5 ^h
Finley Corrals ^e	4/2	54	22.1	14.4	14.7 ^h
Hart Mountain ^e	4/2	4	1.3	1.8	1.1
Little Bally Mtn. ^e (Nev.)	4/2	6	1.9	3.4	1.6 ^h
Mt. Bidwell (Calif.)	3/27	64	25.6	25.8	-
North Star (Calif.)	3/27	40	15.4	16.3	-
Patton Meadows ^e	4/2	60	24.6	15.7	17.5 ^m
Quartz Mountain	3/29	4	1.3	4.3	4.5
Sherman Valley ^e	4/2	36	13.3	11.8	12.1
Silver Creek	3/26	0	0.0	T	1.0
State Line ^e (Calif.)	4/2	30	11.1	6.4	7.1
Strawberry	3/31	24	7.9	7.0	6.2
Strawberry ^e	3/31	22	7.7	4.0	5.7 ^h
Summer Rim	3/28	60	24.7	13.0	17.0
Summer Rim Pillow*	3/28		25.7	10.9	-
Summer Rim ^e	4/2	66	27.0	13.8	17.3 ^m
Sycan Flat ^e	4/2	12	3.8	1.1	4.7 ^h
Willow Creek ^e	4/2	6	1.9	2.0	2.9

APRIL 1, 1974

APRIL 1, 1974

SNOW	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave.
DRAINAGE BASIN and/or SNOW COURSE					

HARNEY BASIN WATERSHEDS					
Blue Mountain Springs	3/29	64	24.6	11.8	15.6
Blue Mtn. Springs Pillow*	3/29		21.0	8.7	- -
Buck Pasture ^e	3/26	0	0.0	0.0	1.9
Buckskin Lake ^e	3/26	0	0.0	0.0	0.0
Call Meadows ^e	3/26	6	2.2	1.1	3.1
Delintment Lake	3/28	19	5.8	4.2	6.0
Denio Creek ^e	3/26	0	0.0	0.0	0.2
Disaster Peak (Nev.)	3/26	34	14.2	12.1	10.8
Emigrant Butte	3/28	0	0.0	0.0	1.6
Fish Creek	3/31	73	28.9	26.3	25.4
Fish Creek Pillow*	3/31		28.8	26.7	- -
Fish Creek ^e	3/26	60	24.0	24.1	23.4
Hart Mountain ^e	4/2	4	1.3	1.8	1.1
Idlewild Camp	3/29	14	5.2	0.0	3.6
Idlewild Camp Alternate	3/29	0	0.0	0.0	- -
Izee Summit	3/30	24	7.8	6.2	6.7
Lake Creek R. S.	3/29	39	13.6	6.6	8.9
Oregon Canyon ^e	3/26	10	4.4	10.5	4.1
Rock Spring	3/28	13	4.8	4.0	4.0
Silvies	3/31	27	11.9	13.9	13.1
Silvies Pillow*	3/31		28.8	16.8	- -
Snow Mountain	3/28	42	13.8	10.6	12.6
Snow Mountain Pillow**	3/22		16.7	6.4	- -
Starr Ridge	3/28	17	6.0	2.8	3.9
Stinking Water	3/27	0	0.0	0.0	0.8
Trout Creek ^e	3/26	21	9.2	15.7	7.3
"V" Lake ^e	3/26	18	7.9	11.9	5.0
Silvies ^e	3/26	0	0.0	11.9	9.4

**Telemetry Reading.

1/Location has been changed--surveys are made on an alternite site and data has been revised accordingly.

SNOW	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
DRAINAGE BASIN and/or SNOW COURSE				Last Yr.	Ave. 1

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(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72 adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 2

APRIL 1, 1974

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)			
Name	Elevation	Depth	Capacity		This Year	Last Year	Average i	
OWYHEE, MALHEUR WATERSHEDS								
Bear Creek (Nev.)	7800	72	16.8	3/27	10.5	9.6	11.5 ^h	
Big Bend (Nev.)	6700	48	16.7	3/21	16.7	12.0	15.0 ^h	
Blue Mountain Spring	5900	42	16.9	3/29	12.2	6.6	11.5 ^m	
Jack Creek, Lower (Nev.)	6800	48	8.6			- -	7.9 ^h	
Jordan Valley	4390	48	19.3	3/28	15.6	16.5	16.2 ^m	
Mud Flat (Ida.)	5500	48	12.8			11.2	13.3 ^m	
Rodeo Flat (Nev.)	6800	42	11.0	3/21	7.8	4.1	8.4 ^h	
Taylor Canyon (Nev.)	6200	48	15.1	3/27	15.1	12.6	12.9 ^h	
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS								
Blue Mountain Summit	5100	36	16.8	3/28	13.3	9.8	12.1 ^m	
Dooley Mountain	5430	36	9.2	3/25	6.9	3.3	4.9 ^m	
Emigrant Springs	3925	48	22.3	3/27	21.3	21.1	21.0 ^m	
Ladd Summit	3730	48	18.9	3/28	13.8	10.3	11.8 ^m	
Moss Springs	5850	36	25.8	4/4	15.8	14.5	15.0 ^m	
Tollgate	5070	48	23.6	3/27	16.6	17.2	18.9 ^m	
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS								
Battle Mountain Summit	4340	48	13.8	3/29	13.7	13.7	13.4 ^m	
Emigrant Springs	3925	48	22.3	3/27	21.3	21.1	21.0 ^m	
Tollgate	5070	48	23.6	3/27	16.6	17.2	18.9 ^m	
UPPER JOHN DAY WATERSHEDS								
Battle Mountain Summit	4340	48	13.8	3/29	13.7	13.7	13.4 ^m	
Beech Creek	4800	48	21.3	D I S C O N T I N U E D				
Blue Mountain Spring	5900	42	16.9	3/29	12.2	6.6	11.5 ^m	
Blue Mountain Summit	5100	36	16.8	3/28	13.3	9.8	12.1 ^m	
Derr	5670	24	9.0	3/26	8.7	7.9	8.5 ^m	
Marks Creek	4540	36	14.1	3/29	13.6	10.3	13.0	
Snow Mountain	6300	48	16.7	3/28	15.4	12.1	14.3	
Starr Ridge	5150	36	10.6	3/28	10.6	9.6	10.1 ^m	
UPPER DESCHUTES, CROOKED WATERSHEDS								
Derr	5670	24	9.0	3/26	8.7	7.9	8.5 ^m	
Marks Creek	4540	36	14.1	3/29	13.6	10.3	13.0	
Snow Mountain	6300	48	16.7	3/29	15.4	12.1	14.3 ^m	
KLAMATH WATERSHEDS								
Quartz Mountain	5230	48	15.3	3/29	10.0	7.3	9.1 ^m	

BASIC DATA SUPPLEMENT 2

APRIL 1, 1974

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average ⁱ
LAKE COUNTY, GOOSE LAKE WATERSHEDS							
Camas Creek	5720	42	14.5	3/29	13.3	12.9	12.8 ^m
Quartz Mountain	5230	48	15.3	3/29	10.0	7.3	9.1 ^m
HARNEY BASIN WATERSHEDS							
Blue Mountain Spring	5900	42	16.9	3/29	12.2	6.6	11.5 ^m
Silvies	6900	48	16.4	b		15.9	13.7 ^m
Snow Mountain	6300	48	16.7	3/29	15.4	12.1	14.3 ^m
Starr Ridge	5150	36	10.6	3/28	10.6	9.6	10.1 ^m
Willow-Bald	5000	24	6.6	3/28	6.4	4.5	5.9 ^m

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 3

APRIL 1, 1974

PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION		PAST RECORD	
		Date of Reading	Precipitation	Last Year	Average [†]
Allison Work Center (Harney County)	5320	From 2/27 to 3/29	4.50	5.06	
Althouse (Josephine County)	4530	From 2/27 to 3/29	8.10	4.73	
Arbuckle Mountain (Morrow County)	5400	From 2/23 to 3/27	2.70	1.82	
Brooks Meadow (Hood River County)	4520	From 2/26 to 3/26	5.62	0.56	
Camas Creek (Lake County)	5825	From 2/27 to 3/29	6.40	2.50	
County Line (Umatilla County--Starkey Hdqs.)	4800	From 2/28 to 3/28	2.25	.00	
Goodrich Lake (Baker County)	6775	From 2/28 to 3/28	6.00	6.44	
Lucky Strike (Umatilla County)	5050	From 2/28 to 3/28	2.25	2.10	
Marks Creek (Crook-Wheeler Cos.)	4540	From 2/27 to 3/29	2.50	--	
Quartz Mt. Summit (Lake County)	6300	From 2/26 to 3/29	4.06	2.43	
Silver Creek (Lake County)	4900	From 2/28 to 3/26	1.97	1.85	
Strawberry (Lake County)	5760	From 1/26 to 3/31	9.40	--	
Summer Rim (Lake County)	7200	From 2/27 to 3/27	5.00	3.00	
Taylor Butte (Klamath County)	5040	From 2/25 to 3/21	3.01	1.40	
Taylor Green (Union County)	5800	From 2/27 to 4/4	5.80	2.20	
Tipton (Baker County)	5100	From 2/28 to 3/28	2.25	2.25	
<p>(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.</p>					

The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE

- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon State Engineer and Corps of State Watermasters
- Oregon State Highway Engineers
- Soil and Water Conservation Districts of Oregon

COUNTY

- Douglas County Water Resources Survey

FEDERAL

- Department of Agriculture
 - Cooperative Extension Service
 - Forest Service
 - Soil Conservation Service
- Department of Commerce
 - NOAA, National Weather Service
- Department of the Interior
 - Bonneville Power Administration
 - Bureau of Land Management
 - Bureau of Reclamation
 - Fish and Wildlife Service
 - Geological Survey
 - National Park Service
- Department of National Defense
 - Corps of Army Engineers

PUBLIC UTILITIES

- Pacific Power and Light Company
- Portland General Electric Company
- California-Pacific Utilities Company

MUNICIPALITIES

- City of Baker
- City of La Grande
- City of The Dalles
- City of Walla Walla

IRRIGATION DISTRICTS

- Arnold Irrigation District
- Associated Ditch Companies
- Burnt River Irrigation District
- Central Oregon Irrigation District
- East Fork Irrigation District
- Grants Pass Irrigation District
- Hood River Irrigation District
- Jordan Valley Irrigation District
- Juniper Flat Irrigation District
- Lakeview Water Users, Incorporated
- Medford Irrigation District
- Middle Fork Irrigation District
- North Board of Control - Owyhee Project
- North Unit Irrigation District
- Ochoco Irrigation District
- Rogue River Valley Irrigation District
- South Board of Control - Owyhee Project
- Squaw Creek Irrigation District
- Talent Irrigation District
- Tumalo Project
- Vale-Oregon Irrigation District
- Warm Springs Irrigation District

PRIVATE ORGANIZATIONS

- The Crag Rats, Hood River, Oregon

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